# FACTORS INFLUENCING FINANCIAL ACCESS TO HOUSING MICROFINANCE BY LOW INCOME EARNERS IN KENYA

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#### **DECLARATION**

This research project is my original work and has not been submitted for examination in any other university.

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This research project has been submitted for examination with my approval as the University supervisor

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#### **DEDICATION**

I dedicate this work to the Lord Almighty, to my late father, my mother, my wife, my children, my sister and my brothers. I especially thank my wife and my children for their support, encouragement and patience during the entire period of my study and also for their prayers towards the successful completion of this course. I also dedicate this work to my close friends and colleagues for their supports.

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# **ABRREVIATIONS**

CGAP:	The Consultative Group to Assist the Poor
DTM:	Deposit Taking Microfinance
EMI:	Equated Monthly Installment
HMF:	Housing Microfinance
HMFIs:	Housing Microfinance Institutions
IMF:	International Monetary Fund
INR:	Indian Rupee
KES:	Kenya Shilling
KWFT:	Kenya Women Finance Trust
MFIs:	Microfinance Institutions
NACHU:	The National Cooperative and Housing Union
NBFIs:	Non Banking Financial Institutions
NBFC:	Non Banking Financial Company
NGOs:	Non Governmental Organizations
ROA:	Return on Asset
ROE:	Return on Equity
SACCOS:	Saving and Credit Cooperative Societies

- **UN-DESA:** United Nations-Department of Economic and Social Affairs
- **USAID:** United State Agency for International Development

#### ABSTRACT

Access to housing finance is limited in most emerging economies as residential mortgage lenders do not finance the housing needs of the low income earners, when exposed to large cash-flow and credit risks. Housing microfinance is one of the recent avenues for low income households to access loans for housing. The study sought to establish the factors influencing financial access to housing microfinance by low income earners in effect in Kenya. This study was based on an exploratory design. The target population comprised 14 MFIs in Kenya which provide housing micro loans that are registered with the Association of Microfinance Institutions of Kenya (AMFI). The study therefore used a census of all the 14 housing microfinance institutions. The study used both primary and secondary data sources. Data analysis involved reducing accumulated data to manageable levels, developing summaries, looking for patterns and applying statistical techniques.

The study established that capacity/source of repayment was key in designing the housing micro loan. The study also established that the purpose of the loan (Type of product) was key in designing the housing micro loan. The study further established that security/ risk mitigation was key in designing the housing micro loan. The study also concluded that MFIs take into account the purpose of the loan, the risk mitigation, the profession of the client, the loan tenure and the economic conditions during the product design. The study recommended that MFIs that do not conduct pilot surveys to market test products should do so in order to ensure that the product design fits the needs of the customer. The study recommended that MFIs embrace new technological developments so as to ensure their serve their customers in a better faster and more efficient manner.

#### CHAPTER ONE INTRODUCTION

# **1.1 Background of the Study**

A home is the most important asset most of people will ever own. Shelter is a physiological human need so much that even those who cannot afford it still need it (Wafula Nabutola, 2004). Yet, access to housing finance is limited in most emerging economies, as residential mortgage lenders do not finance the housing needs of the low income earners, when exposed to large cash-flow and credit risks. Low income households often lack the income to afford a market-rate mortgage for a decent house that meets common quality standards, and lending remains limited to low income households with steady and verifiable incomes.

Only few emerging countries, according to the World Bank survey (Loic Chiquier & Michael Lea, 2009), such as Mexico or Malaysia have mortgage lenders reached down to finance low income households. Beyond lending markets, most large-scale programs of housing subsidies have fallen far short of achieving their social objectives. As a result of these and other factors, the main funding sources for low income households to acquire housing, besides their own savings, have been trade credit or neighborhood money lenders at expensive credit terms. In this context, microfinance institutions (MFIs) have observed that some of their clients use micro-enterprise loans to improve their housing conditions as a supplement or alternative to saving.

In recent years the world of microfinance has begun to address this issue more diligently, and has been developing various methodologies designed to laid low income earners in their search for adequate shelter. Some MFIs have expanded their range of microfinance loans from enterprise lending to personal asset building (housing).

Given that majority of Kenyans cannot afford developer-built housing in its current form, therefore Housing Micro Finance Institutions (HMFIs) deserve further investigation on their impact on low income earners access to finance.

#### **1.1.1** Microfinance Institutions and Housing Micro Loans

Housing microfinance is one of the recent avenues for low income households to access loans for housing. Microfinance for housing was first strongly entrenched in Latin and Central America, but is now widespread in other regions of Asia and finally taking hold in Sub Sahara Africa. Unfortunately, microfinance for housing in Kenya is not well discussed and debated at policy level. Despite of the fact that microcredit sector in the country is growing faster, the potential role of microfinance for housing has not been recognized. There has not been much effort to study the potential size of low segment housing finance markets in Kenya (Centre for Affordable Housing Finance in Africa, 2009).

Housing microfinance (HMF) intersects both housing finance and microfinance. HMF consists mainly of loans to low income earners for renovation or expansion of an existing home, construction of a new home, land acquisition, and basic infrastructure. HMF can be defined as "any micro financial tool to support investment in the components of

housing, including land purchase or access, provision of or improvement to services, full or incremental house construction, renovation of maintenance" (Daphnis-CAHF, 2010).

HMF reaches clients who lack access to formal financial institutions and who cannot afford the payment on a mortgage loan, which would be large enough to finance a completed house situated on serviced urban land sold at market prices. Daphnis (2003) defines the most important issues related to the design of financially viable housing microfinance services as client's capacity to pay, loan repayment period, pricing, affordability, construction assistance, security requirements, land issues and capital adequacy.

Microfinance industry changed significantly due to several drivers. First, the degree of professionalization within the industry, moving for from local spontaneous micro lending initiatives to better equipped and organized institutions. Also, a large number of global financial intermediaries, for different reasons as housing microfinance providers, are starting to be involved in microfinance, so contributing to modify the landscape of traditional MFIs. A regulatory framework is needed. The literature concerning financial regulation affirms that a market must be regulated in the eventuality that it could not achieve an efficient equilibrium autonomous. The goals of regulators are to increase efficiency in capital allocation, to implement effective risk management procedures and to protect less informed parties that enter into a financial industry itself, the prudential regulation of intermediaries and market, and the level of transparency and disclosure (Prakash Singh, 2005).

MFIs pursue a double bottom line of outreach and sustainability. On the one hand, MFIs fulfill an outreach mission by providing financial services to the poor. On the other hand, MFIs must operate like other financial institutions, lending to creditworthy clients and earning positive returns on their loan portfolios in order to sustain and expand their operations. The efficient functioning of MFIs is of paramount importance for long run sustainability, which refers to the capability of the institutions to generate enough income to at least repay the opportunity cost of all inputs as well as assets. Different variables are included that can explain the level of efficiency of MFIs. These variables can be divided into different groups based on basic characteristics, governance, financial management, performance and location (Chaves, Gonzalez Vega, 1996).

#### 1.1.2 Financing Cost by HMFIs

The cost of finance is the total expenses associated with securing financing for a project or business arrangement. Financing costs for housing microfinance institutions (HMFIs) include cost of funds (interest, financing fees charged by intermediary financial institutions), operating cost (Personnel and administrative expense), risk of default as provision for bad debt is often a regulatory requirement for intermediary financial institutions which finance MFIs and as well for regulatory authorities. MFIs incur costs not only in sourcing funds and disbursement of these funds to microfinance clients but also in promotion and monitoring of microfinance client groups and development of processes for improving efficiencies of service delivery (Daphnis, 2004).

High operating costs and capital constraints within the MFI industry impact the pricing of housing microfinance services which tend to be several times higher than traditional consumer or mortgage loans of banks. The risks and cost are different. High interest rates represent the price of access to non-collateralized lending for a riskier clientele that generally lack alternatives. MFIs justify high rates in terms of the need to cover higher financial and operational costs (CGAP, 2009).

#### **1.1.3 Factors Impacting the Financing Cost**

By designing a HMF product, the institution has to consider the following questions: what can the client afford and what can the institution afford? HMFIs have several constraints that define the final loan product's design. In designing the product, HMFI has consider the cost of funds, the costs to run the institutions and manage the loans and the adjustment of the product (market assessment) with the target clients as loan losses, or more appropriately, what the losses are expected to be, play a critical role in shaping how much the institution charge all its clients. Another and crucial factor in HMF product design consists of guarantees and collateral. Typically, mortgage liens make little sense for loans of modest amount.

High interest rates for housing micro credit represent the price of access to noncollateralized lending for a riskier clientele that generally lack alternatives (Daphnis, 2003). Rock and Otero (1997) argue that the current paradigm for prudential regulation and supervision has been designed for conventional collateral based finance, which presupposes the existence of "wealth". Wealth in these terms is normally seen as a freely transferable asset. In most poor communities assets are by definition scarce, however they are not easily transferable outside of the community. A new aspect of the product design from a HMFI perspective to home lenders involves construction assistance services which impact the cost of the product.

Regulation has many obvious advantages however it can come at a price. The breadth and diversity of the microfinance industry can lead to difficulties and great expenses in order to administer and monitor all of the MFI's (Harris, 2010). The cost of supervision can often be costly and these costs are partly passed on to MFI's in the form of licensing fees, making it more expensive for the MFI to operate. Regulatory institutions can impose interest rate caps it can also limit the customer base and the geographical scope for the MFI. Capital requirements (a minimum capital) can limit existing MFI's in terms of how widely they can operate (Harris, 2010). The best practice in business is an efficient transformation of given inputs into maximum attainable output.

#### **1.1.4** The Overview of Housing Microfinance in Kenya

The Microfinance Act became operation in 2008 and sets out the legal, regulatory and supervisory framework for the microfinance industry in Kenya. The principal object of the Act is to regulate the business and operations of microfinance institutions (MFI) in Kenya through licensing and supervision. The Act enables Deposit Taking Microfinance (DTM) Institutions licensed by the Central Bank of Kenya to mobilise savings from the general public, thus promoting competition, efficiency and access. Regulations for Non Deposit Taking Microfinance Institutions are yet to be put in place.

Retail lenders of HMF span tiers, from regulated first tier organizations which can raise capital from deposits, through to cooperatives and NGOs at the second tier and finally informal third tier lenders (Mickael Kihato, 2013). First tier lenders include microfinance

banks (Deposit Taking Microfinance) such as K Rep, Faulu Kenya, Kenya women's Financial Trust and commercial banks such as Equity Bank, Cooperative Bank and Family Bank. Second tier lenders include SACCOs (Savings and credit cooperative societies), cooperatives and Microfinance institutions that offer HMF. These also include housing NGOs which branched into housing microfinance lending on recognizing the demand, such as the National Cooperative and Housing Union (NACHU) an apex SACCO formed in response to a common need for housing and has grown considerably since its establishment in 1979. Finally, there are third tier, generally unregulated HMF players who include rotating savings and credit cooperatives and other informal lenders. International development organizations have given explicit attention to the growth of HMF lending capacity among Microfinance Institutions, housing NGOs and SACCOs as part of their effort to grow scale and address housing backlogs across Africa and globally. They are in many ways the pioneers of explicit HMF investment and lending in Kenya (Mickael Kihato, 2013). A list of microfinance institutions operating in Kenya is given in the appendix section.

#### **1.1.5** Access to Housing Microfinance in Kenya

The recent development of HMF shows that economically active low income earners can finance some of their housing needs incrementally and affordably and under conditions that allow the lender to cover all associated costs. As the same time, HMF market (current and potential), comprises individuals with a demonstrable capacity to repay.

HMF typically comprises small loans (usually from KES 10,000 to KES 500,000) of limited maturity (from one year to three years) generally without collateral. Housing microfinance offers incremental loans that fit with the way low income earners people build: progressively and over time. The microfinance methodology applies with financial and operational costs covered through interest and fees, a thorough knowledge of neighborhoods, additional guaranteed from family members and frequent contacts with borrower. Most HMF clients have a good record of repaying previous enterprise microfinance loans. HMF is often delivered with technical assistance to ensure the durability of the resulting construction.

The demand for housing microfinance in Kenya is increasing. Kenya remains one of the largest and most viable markets for social housing in East Africa (Scoping the Demand for Housing Microfinance in Africa, 2009). Affordable housing remains one of the key challenges in infrastructure and basic human needs, particularly in rapidly urbanizing cities and peri-urban areas. The government defines the low-income segment as earning below KES 16,000 per month (2010 Kenya Housing Bill). Noteworthy is that only 3.6% of Kenyans earn more than KES 30,000 per month and nearly 90% of the population falls below a monthly income of KES 25,000. In the formal employment sector, 50% of formal employees earn less than KES 20,000 per month.

#### **1.2 Statement of the Problem**

Housing is recognized as a basic right in Kenya Constitution. Besides, shelter is a basic human need that helps ensure personal safety and health. The home is a personal asset that usually appreciates in value over time. Home improvement not only enhances living conditions, it is an investment. Thus, there is an urgent need for alternative financing models like microfinance, because of the failure of the formal housing finance system in addressing the housing needs of the poor. To address this issue of limited access to housing finance by low income earners, new providers are developing creative approaches to the problem. A range of financial institutions are applying good microfinance practice to housing finance, and are delivering much needed services to low income earners customers. Nevertheless, there are still current challenges for expending effective housing microfinance for specialized institutions.

The needs of the low income earners with regard to borrowing have not been adequately addressed in Kenya (National Housing Policy for Kenya). Low-income groups have no capacity to negotiate credit conditions and are forced to comply with the housing solutions allocated by the economic and profitability considerations of the housing market.

Identification of institutions, capital structure, housing microfinance products and services, regulatory framework, and their effect on the financing cost by HMFIs is missing in the policy debates on pro-poor housing in Kenya context. There is therefore a research gap on the effect of financing cost by Housing Microfinance Institutions on the access to credit by low income earners in Kenya.

Previous studies in the field point to certain clear facts like, in just two decades, housing microfinance programs have attained a prominent position among organizations addressing the shelter needs of the urban and rural poor in many regions around the world (Harvard, 2000).

HMFIs surveyed by International Habitat for Humanity (Stickney, 2006) said the lack of availability of appropriate funding was the most important constraint for the expansion of

their housing portfolio. These HMFIs cited lack of institutional capacity and technical know-how as the second most important problem in limiting the expansion of their home lending.

Most of researches had emphasized mainly on the trade-offs and synergies between the overall objectives of the micro finance business (financial sustainability) and outreach to the poor and welfare impact (Rhyne, 1998; Christen, 2001; Morduch, 2005). There are few studies available on the topic in Kenya context (Wanyeki A.W, 1998; Wafula Nabutola, 2004). Researches and studies were mainly focused on affordable housing and less on the tools and process for low income earners to purchase or acquire a shelter (Bonyo, 2010; Aden V. Nopper, 2011; Mungai Eliud, 2011). Few researches have attempted to address the housing finance to low income earners (Oriaro, 2000).

The study aimed to answer the following question: what is the effect of product design, regulatory framework and efficiency on financing cost by Housing Microfinance Institutions on the access to credit by low income earners in Kenya?

## **1.3 Objectives of the Study**

#### **1.3.1 General Objective**

The study sought to establish the factors influencing financial access to housing microfinance by low income earners in Kenya.

#### **1.3.2 Specific Objectives**

The study specifically sought to:

- To establish the effect of the product design ( loan size, loan tenure, interest rate & fees, construction assistance, and collateral type) on financing cost of housing microfinance institutions;
- ii. To establish the effect of regulatory framework (licensing fees, interest rate caps and minimum capital requirement) on financing cost of housing microfinance institutions;
- iii. To establish the effect of efficiency (cost of funds, administration and operation costs, loan loss rate, subsidies and technical assistance, competitiveness and profitability) on finance cost of housing microfinance institutions.
- iv. To establish the effect of financing cost by HMFI on the access to housing finance by low income earners in Kenya.

#### **1.4 Value of the Study**

This study would be useful to microfinance institutions which aim to play a key role in Kenya housing sector. The management of housing microfinance institutions would have an empirical basis upon which they can base their decisions on product development, business development and operations or supervision.

This study would also guide policy makers in the housing sector as well in finance sector especially the Central Bank of Kenya in coming up with policies related to housing finance in the microfinance industry in Kenya. Researchers would also find this study a very useful study as regards the variables measured in the study. Future research in Kenya and especially in housing microfinance sector can be based on this study. The recommendations for future studies would also guide future researchers in this area.

#### CHAPTER TWO LITERATURE REVIEW

### **2.1 Introduction**

This chapter presents a literature review. For instance, section 2.2 discusses the theoretical literature. Section 2.3 presents the empirical literature on microfinance for housing. A summary of the chapter is then outlined.

## **2.2 Theoretical Literature**

This section starts by introducing selected background theories related to microfinance and then move on to the theory of microfinance triangle.

#### 2.2.1 Principal - Agent Theory

Principal-Agent Theory proposed in the works of Ross and Mitnick and further expanded in the 1980's by Fama and Jensen analyzes information asymmetry in a principal-agent relationship, arising when a principal contracts an agent to act on his behalf. The deviation from the interest of the principal by the agent, the 'agency costs' consist of the costs inherently associated with using an agent and the costs of techniques to mitigating the problems associated with a use of an agent or employing mechanisms to align the interests of the agent and of the principal.

Credit relationships exhibit characteristics of an agency problem, as agents, the borrowers, act on behalf of the principal, the lenders, whose funds must be repaid. Information asymmetries usually arise in agency relationships because one of the parties owns privileged information. In a lender-borrower relationship, the principal can be unable to monitor the actions or the type of the agent. Consequently, the principal must invest resources to recognize agent types or to induce agents to undertake actions not damaging the interests of the lender. Therefore, collateral is a key feature of a loan contract and a partial solution to principal-agent problem, present in microfinance (Tomas, 2013).

Collateral helps MFIs to solve two main problems. It limits losses in the case of default, but it also solves the problem of asymmetric information between MFIs and borrowers. Theories about collateral and the asymmetric information problem consider collateral either as a signaling instrument providing MFIs with information about the borrower's quality as quality borrowers know that the chance of default on the loss of their collateral is unlikely and therefore are more willing to pledge collateral in compensation of more favorable contract terms than low-quality borrowers (Tomas Hes, 2013). Hence, collateral helps reduce adverse selection by signaling (Stiglitz and Weiss, 1981). Despite the importance of collateral, a MFI cannot oblige their poor customers to pledge physical collateral since they have little or no collateral. Therefore, loans provided by MFIs will be in the form of physical-collateral-free loans, for example savings discipline of borrowers and group-lending with joint liability can be used as collateral (Woradithee, 2011).

#### 2.2.2 Efficient Market Hypothesis

Efficient market hypothesis (EMH), developed by Fama at the University of Chicago in the 1960s, alleges that markets incorporate the information relevant to prices, while the price of a given asset represents the value of that asset, reflecting all available information. The basis of EMH is thus rational expectations concept which states that agent's predictions of the future value of economically relevant variables are not systematically wrong and errors are random. The EMH additionally claims that prices reflect even "insider" information. Investors and researchers have disputed the EMH both empirically and theoretically, as the Financial Crisis (2007-2008) has led to criticism of the hypothesis. "Among the causes of the recent financial crisis was an unjustified faith in rational expectations in market efficiencies." (Paul Volcker, FED Chairman.)

Critics have suggested that financial intermediaries reduce the accuracy of disclosures and efficiency of markets by creating private information asymmetries, while the prices of securities are influenced by speculators as well as by insiders and institutions that buy and sell stocks for reasons unrelated to their value, such as for diversification, liquidity and taxes. Analysis of the market efficiency in microfinance investments funds is considered an important issue. For example, unless the market is sufficiently efficient, it's not likely to allow a flow of funds to each MFI in appropriate manner, which might prevent MFIs from reaching their major clients, that is, the poor borrowers (Tomas Hes, 2013). In the field of prudential regulation, policymakers face regulator's dilemma of safeguarding the health of the financial system, facing difficult choices about the extent to which public institutions should intervene in credit markets on behalf of debtors (Peterson, 2007).

Microfinance experiences regulatory evolution as well. Microfinance is shifting from a niche product to a globally recognized form of finance, but as the industry becomes more diverse, regulatory and market gaps keep the industry from sound operation (Tomas Hes, 2013). One of the major obstacles for macro-regulation of the sector is heterogeneity of the MFIs and products offered. MFIs are different types of institutions such as banks,

rural banks, non-bank financial institutions (NBFIs), non-government organizations (NGOs), credit unions or cooperatives, with different legal status and purpose. The heterogeneity of MFIs is strength of microfinance, permitting creative permeation into different types of environments as well as a weakness, in that it does not allow simple description or standardization, a therefore regulation, with a sector composed of so many varied players with different needs and purposes (Hes,2013).

#### 2.2.3 The Transaction Costs Theory

The transaction cost approach has been developed from the theory of the firm by Ronald Coase (1960). The transaction cost can be defined as "any costs that arise due to the existence of institutions and the appearance of an economic exchange" (Cheung, 1969). Transaction cost theory concentrates on the relative efficiency of different exchange processes. Firms begin to organize their production in firms when the transaction cost of coordinating production through the market exchange, given imperfect information, is greater than within the firm. According to Williamson (1985), the determinants of transaction costs are frequency, specificity, uncertainty, limited rationality, and opportunistic behavior.

The concept of Transaction Costs has been mostly used in the microfinance literature to justify the high interest rates of lenders that would be due to the small loan size. The administrative costs are inevitably higher for tiny micro lending than for normal bank lending. Lending out a 100 million Ksh in 10,000 loans of Ksh 10,000 each will obviously require a lot more in staff salaries than making a single loan for the total amount. As a result, interest rates in sustainable microfinance institutions are

substantially higher than the rates charged on normal bank loans (Armendàriz and Morduch, 2010).

Markowski (2002) states MFIs have a dual mission: a social mission "to provide financial services to large numbers of low income persons to improve their welfare", and a commercial mission "to provide those financial services in a financially viable manner". Simanowitz with Walter (2002) argue that microfinance is a compromise between this social mission and commercial mission.

#### 2.2.4 The Micro Finance Triangle model

The triangle of micro finance is a conceptual framework developed by M.Zeller and R. L. Meyer (2002) which seeks to give a better understanding of the existing trade-offs and synergies between the overall objectives of the micro finance business : financial sustainability, outreach to the poor and the welfare impact. The three objectives of is illustrated in the triangle of microfinance as below:

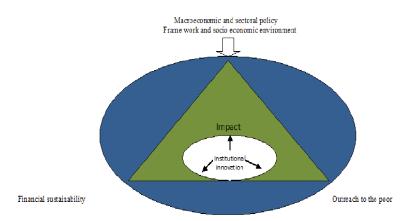


Figure 1: The triangle of microfinance/ source: M. Zeller & R.L. Meyer, 2002

The inner circle represents the many types of institutional innovations that contribute to improving financial sustainability, impact and outreach. These innovations can be costreducing information systems (financial sustainability), designing demand-oriented services and training of clients (impact), and more effective targeting mechanisms or lending methodologies (outreach).

The outer circle represents the external socioeconomic environment as well as the macroeconomic and sectoral policies that affect the performance of the financial institutions. The outreach of the institutions is a heterogeneous population, whose degree of exclusion from financial services may vary and whose distance from the poverty line in their respective regions may differ. Outreach is also the social value of the output of the MFI in terms of depth, worth to users, cost to users, breadth, length, and scope. Depth of outreach is how far down the poverty scale of the target population the institutions are reaching and the breadth of outreach is the number of users. The worth to users is how much the borrowers are willing to pay and depends on the loan contract and the tastes, constraints and opportunities of the user. The cost of outreach to users is the cost of a loan to a borrower and includes both price and transaction costs. The length of outreach is the number of financial services offered by the MFI.

There are also potential synergies from the three objectives of the triangle. Financial sustainability can be perceived by potential clients as an important factor when becoming a client and can therefore improve the outreach of the MFI. This is especially important for institutions approaching potential savers. An institution striving for financial sustainability becomes very sensitive for client demand which means that they tend to improve products and operations. This in turn generates better financial services which

generates greater economic benefits for the clients and thus greater impact (Zeller& Meyer, 2002).

#### **2.3 Determinants of Financing Cost**

There are three kinds of costs the MFI has to cover when it makes microloans. The first two, the cost of the money that it lends and the cost of loan defaults, are proportional to the amount lent. The third type of cost, transaction costs, is not proportional to the amount lent. The transaction cost of a KES 500,000 loan is not much different from the transaction cost of a KES 100,000 loan. Both loans require roughly the same amount of staff time for meeting with the borrower to appraise the loan, processing the loan disbursement and repayments, and follow-up monitoring. This cost should be even higher for housing microloans if we consider additional costs due to additional services, regarding to the nature of the product, as construction assistance (CGAP, 2009).

MFIs have to charge rates that are higher than normal banking rates to cover their costs and keep the service available. This does not mean that all high interest charges by MFIs are justifiable. Sometimes MFIs are not aggressive enough in containing transaction costs. The result is that they pass on unnecessarily high transaction costs to their borrowers. Sustainability should be pursued by cutting costs as much as possible, not just by raising interest rates to whatever the market will bear. New technology also offers to help reduce costs, so the expectation is that rates to continue dropping as institutions become increasingly efficient at delivering services to poor people (CGAP, 2009). In their eagerness to emphasize the importance for the development of sustainable microfinance by removing constraining interest rate ceilings, some advocates may have overstated the insensitivity of borrowers to high interest rates. In contrast, Dehejia, Montgomery, and Morduch (2005), using data from a credit cooperative in Dhaka, and Karlan and Zinman (2007), using data from a South African consumer lender, both find rather high elasticities of loan demand with respect to interest rates, that is, loan demand decreases as interest rates increase. Emran, Morshed, and Stiglitz (2006) provide a theory to reconcile these empirical findings with practitioners' oft-repeated assertions that borrowers are insensitive to interest rates.

#### **2.3.1 Product Design**

Daphnis (2004) suggested that the first step in product design involves a market assessment and the categories of questions to be asked in the household surveys of such a market assessment include: basic information on household income and expenses; Conditions and amount of existing informal and formal debt; Potential demand for microloans as regards loan size and type, collateral, interest, terms; Savings; Bank and non-bank financial services used by the household. The market analysis results in estimates of the potential effective demand for various HMF products and, joined with other data, the client's capacity to repay. With the term established, the lender then prices the HMF product. A simplified pricing formula, as below, used in microfinance illustrates the process and the issues involved.

# $R = \frac{AE + LL + CF + K - II}{1 - LL}$

R= Annualized effective rate of returnLL= Loan Loss rateAE= Administrative expensesCF = Cost of fundsK= Desired capitalization rateII= Investment income

Daphnis (2004) also noted another and crucial factor in HMF product design consists of guarantees and collateral. From his point of view, mortgage liens make little sense for loans of modest amount. His arguments are based on the high on-going costs of full legal little (high registration fees and real property transfer taxes) and hence the ability to secure a mortgage frequently far exceed the benefits. Also when a mortgage is taken, its execution is often highly problematic because of thin to non-existent resale markets for low/moderate income property, the high costs and long lead times of the foreclosure process. Frank Daphnis noted that instead of mortgage liens, HMF lenders typically join a series of other forms of collateral and guarantee to secure credits. These include: co-signers and other personal guarantees by third parties , chattel mortgages, obligatory savings, often for 6 to 18 months before receiving the loan, assignment of future income, joint liability of a group for the individual's loan (solidarity group), and other assets.

Chiquier and Lea (2009) edited a handbook on housing finance policy in emerging markets which looks at a new aspect of the product design, from a microenterprise perspective to home lenders, involves construction assistance which can include basic construction design to ensure that the proposed intervention complies with basic safety and legal requirements. The construction assistance is commonly provided either by in house capacity of the MFI or by outsourcing the work to a specialized institution/individual.

According to a survey : housing microfinance, the other financial inclusion by Michael Kihato (2013), HMF lenders use affordability ratios similar to those of traditional mortgage finance: housing payments should be no more than 20% to 30% of monthly

income, and housing plus other debt payments should be less than 40% of income. The survey established that current practice in HMF involves terms ranging from one to eight years, with a two to five year median. Repayment period, often more than payment amount, largely drives credit risk. The lower and more informal the household's income, the shorter the repayment periods, typically two to five years, decrease the ability of households to borrow the large sums necessary for financing a complete house upfront at once.

In a study: Scaling Up Housing Micro-Finance in India, conducted by IFMR Capital and National Housing Bank of India (2011), revealed that about 30 % of low income households have regular income stream that can pay off a monthly amortizing housing loan. It was also seen that the requirement of home improvement loan would be more than that of the home loan requirement. The required loan size for would be in the range of INR 50,000 to INR 200,000 (KES 73,000 to KES 292,000) with an affordable Equated Monthly Installment (EMI) of around INR 1000 (KES 1,460). The study also pointed one of the key obstacles faced by financial institutions was lack of title documents. It was advised a significant support from National Housing Bank of India to train the NGO-MFI staff on helping their clients in formalizing their land titles during the course of the loan disbursal process. In terms of product design, given that while some households did have savings in banks, most households saved in the form of cash. One of the major recommendations was that the lack of land titles will require NGO-MFIs to build products which can use paralegal documents for creation of security for lower ticket.

#### 2.3.2 Regulatory Framework

In the last few years, microfinance industry changed significantly due to several drivers as the degree of professionalization within the industry, often moving for from local spontaneous micro lending initiatives to better equipped and organized institutions. Also a large number of global financial intermediaries are starting to be involved in microfinance, so contributing to modify the landscape of traditional MFIs. As a consequence of these factors of change, the size and the complexity of microfinance increased and microfinance risks are changing, together with an increasing capability of MFIs to manage them. It is obvious that all these significant transformations have a deep impact on the regulatory framework, which should be adequately equipped to tackle the new challenges (Prakash Singh, 2005).

For microfinance industry, the choices about regulation and supervision are based on the nature of the activities that are performed by microfinance entities and the legal structure of microfinance. The most sensitive distinction is between credit-only institutions, entities that collect savings (DTM), and intermediaries which provide other financial services not included in traditional intermediation (Prakash Singh, 2005).

According Harris (2010), regulation has many obvious advantages however it can come at a price as cost of supervision, control of interest rate and capital requirement. The breadth and diversity of the microfinance industry can lead to difficulties and great expenses in order to administer and monitor all of the MFI's. Regulatory authorities will need to supervise a growing number of MFI's in a country. Given the variety of MFI types and the different regulatory requirements and standards for each, supervision can often be costly. These costs are partly passed on to MFI's in the form of licensing fees, making it more expensive for the MFI to operate. Regulatory institutions can impose interest rate caps. MFI's naturally bear high costs as they provide small loans in remote areas. Limiting interest rates can prevent usurious lending however it can also limit the customer base and the geographical scope for the MFI. As well a minimum capital requirement can limit entrance into the industry. These requirements can limit the start-up of a new MFI to service clients and can limit existing MFI's in terms of how widely they can operate.

Raven Smith (2006) in a study: the cost and benefits of transforming from an NGO to a Non-Bank Financial Company (NBFC), based on financial analysis of 3 case studies in India, showed positive benefits becoming an NBFC such as greater profitability, greater access to commercial sources of funding, and therefore greater outreach in terms of loan portfolio size and clients reached. From an overall organizational standpoint, the case studies illustrated a tendency of an NBFC-MFI towards greater transparency and efficiency in systems. However, the research was pretty unclear as to the impact of becoming an NBFC on poverty alleviation. The financial analysis showed a decrease in operation expenses when the institutions became NBFC. The study suggested that the transformation from an NGO to a regulated financial company could hurt an MFI's poverty impact. However, the study didn't pick out facts of greater or sustained poverty impact either, as there were no adequate measures of assessing the poverty impact of these organizations. In study done by USAID (2008): maximizing choice, diverse approaches to the challenge of housing microfinance in 4 countries: El Salvador, Kenya, Vietnam and Morocco confirmed that housing microfinance has the potential to serve clients across several segments of a broad middle and lower income market. Based on this research, depending on the legal and regulatory environment of each country, the penetration of HMF varied. In Morocco and El Salvador, a strong regulatory environment supporting low-income housing and microfinance allowed institutions more flexibility in financing housing for the poor.

In Kenya, The Government recognizes that greater access to, and sustainable flow of financial services, particularly credit, to the low-income households and microenterprises is critical to poverty alleviation. Therefore, an appropriate policy, legal and regulatory framework to promote a viable and sustainable system of microfinance in the country has been developed via the proposed Deposit Taking Micro Finance Bill. In addition, full-fledged microfinance units have been established in the Ministry of Finance (the Treasury) and the Central Bank of Kenya to formulate policies and procedures to address the challenges facing microfinance institutions, especially in the rural areas, and to build a database to facilitate better regulation and monitoring of their operations (G.Omino, 2005).

#### 2.3.3 Efficiency

Microfinance institutions justify high rates in terms of the need to cover higher financial and operational costs, as well as in some cases to return a profit to their shareholders. In some cases, the report noted the fact that HMF rates were high had raised issues of consumer protection and this reality should be recognized by policy makers The Consultative Group to Assist the Poor (2004) estimates that only about 5% of MFIs worldwide are financially sustainable while the International Monetary Fund (2005) puts the figure at only 1%, so this is a huge issue for the microfinance sector. According to the International Monetary Fund the MFIs that have become self-sustainable tend to be larger and more efficient. They also tend not to target the very poor, as targeting the less poor leads to increases in loan size and improved efficiency indicators, whereas MFIs focusing on the poorest tend to remain dependent on donor funds (IMF, 2005). In order to achieve such sustainability, while at the same time reaching those most in need, microfinance programmes need to be managed in a rigorous and professional manner, subsidies must be removed, and tight credit control procedures and follow-up on defaulters needs to be in place (Havers, 1996).

There has been little research conducted on the efficiency of Housing microfinance institution (Havers, 1996). However, several studies examine various measures of MFI efficiency across the regions. Study by Farrington (2000) identifies a number of accounting variables to reflect the efficiency of the microfinance institutions. These accounting variables are administrative expense ratio, number of loans per loan officer and loan officers to total staff, portfolio size, loan size, lending methodology, source of funds and salary structure as the efficiency drivers and hence as the measurements for MFI efficiency. Lafourcade, Isern, Mwangi and Brown (2005) use cost per borrower and cost per saver as measure of efficiency. They found African MFIs incur highest costs per borrower but have the lowest costs per saver. They also mention that regulated MFIs maintain higher efficiency through low costs per borrower and per saver. None of these two studies use any parametric or non-parametric approach to evaluate the efficiency of MFIs.

More recently, Oteng-Abayie (2011) analysed the economic efficiency of 135 MFIs in Ghana and its determinants for the period 2007 - 2010 using Stochastic Frontier Analysis (SFA). Their results show efficiency scores ranging between 0.0712 - 0.7992, with an average score of 0.5629. With regards to the determinants of efficiency, they found that the total savings, cost per borrower, age, average loan balance per borrower, average saving balance per saver are significant determinants of efficiency. However, apart from average saving balance per saver which was negative, all the other coefficients were positive.

However the efficiency analysis of MFIs based on conventional production and intermediation model approach in non-parametric efficiency analysis framework is hard to justify because of their reliance on subsidies. The overall equation linking capital and labor inputs into profits and social change still proves difficult to master without accommodating the subsidized inputs (Cull, 2007). Ahmad Nawaz (2010) attempts to addresses the issue of incorporating the role of subsidies in the efficiency and productivity analysis of MFIs which mainly lend to women. His findings were that lending to women contributes to the financial efficiency in the presence of subsidies only, as the impact becomes insignificant without subsidies. The research shows that MFI's exclusively targeting women tend to be financially efficient only because of the subsidies they receive.

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In housing microfinance literature, there is a difference of opinion between microfinance agencies about the need for housing subsidies. On the one hand, there is a belief that subsidies are necessary because of the traditional association between subsidies and low income housing and because the larger size of housing loans. On the other hand, it is widely accepted that microfinance needs to perform without subsidy finance in order to be able to expand as market conditions permit (Nawaz, 2010).

# 2.4 Empirical Literature

Bogan (2011) and Kyereboah-Coleman (2007) empirically demonstrate the implications of the microfinance firm's capital structure for its operations and impacts on its performance. Bogan (2011) explores how changes in capital structure could improve the MFIs efficiency and financial sustainability by looking at the existing sources of funding for MFIs by geographic region. To investigate the optimal capital structure for MFIs, the author utilizes panel data on MFIs in Africa, East Asia, Eastern Europe, Latin America, the Middle East and South Asia for the years 2003 and 2006 collected from individual institutions as reported to MIX Market. The author argues that the life cycle theory is the most popular explanation of the link between capital structure, sustainability, efficiency, and outreach. However, the study shows that various factors other than life cycle stage seem to be associated with MFI performance. This is why the author turns also to the profit-incentive theory in her paper. Using an IV analysis, Bogan (2011) finds evidence supporting the assertion that increased use of grants, rather than own capital by large MFIs decreases operational self-sufficiency in larger firms. This allows the author to argue that the long-term use of grants may be related to inefficient operations due to lack of competitive pressures associated with attracting market funding.

Another empirical study on the linkage between the capital structure and MFI sustainability is Kyereboah-Coleman (2007) who investigates the impact of capital structure on MFIs performance within the sub-Saharan region. The study uses panel data from Ghana on 52 microfinance institutions covering the ten-year period 1995-2004. It shows that most of the MFIs, which have been operating for about 8 years have about 70 percent of their assets in current form, employ high leverage and finance their operations with long-term debt. The author uses panel data regressions to demonstrate that highly leveraged MFIs perform better by reaching out to more clientele and enjoy scale economies, which enables them to better deal with moral hazard and adverse selection and enhances their ability to deal with risk.

Meyer (2013) conducted a study on the financial and social returns on investment in HMFIs. The study adopted an empirical studies review methodology whereby previous studies on the same were reviewed. The study data collected also included all MFIs or at least all funds willing to disclose information, quantitative measures are complemented with portfolio information (MFIs) such as legal status and regional distribution and the interaction between financial and social return. Besides, questionnaires were distributed to 104 fund managers in October 2011 on fund structures, portfolios and performance. The results show that the funds vary in their structure, their special characteristics and the underlying portfolios. Besides, interest rates paid to funders and investors rise with depth of outreach caused by the HMFIs' higher portfolio yield. Additionally, since operational expenses increase at the same time, the total influence on return measures (such as ROA and ROE) is very small and not statistically significant. Matu (2008) in his research paper entitled "Attracting microfinance investment funds promoting microfinance growth through increased investments in Kenya" has studied microfinance capital structure in order to find out best policy decisions to enhance efficiency in MFI in Kenya. According to his study Kenya still faces major challenges with efficiently and effectively delivering microfinance services in the country. He analyzed three policy alternatives i.e. maintaining status quo, the government regulation of all MFIs and voluntarily for closing the microfinance gap in the supply of microfinance services. All these three alternatives were evaluated against the following criteria: efficiency, financial and political feasibility, and accessibility to determine the best policy option.

His paper explored the feasibility of microfinance investment funds (MIF) as key drivers for channeling alternative sources of funding to microfinance institutions. The growing competition to access funding sources had led to a financial gap in supplying microfinance services, which is jeopardizing MFI sustainability in the country. In 2006, the microfinance Act was passed to enhance the regulating and legal framework for microfinance and to support the growth and development of microfinance in Kenya. This had greatly helped boost the sector resulting in increase in microfinance loans volumes, especially the deposit-taking MFIs such as Equity Bank, K-rep Bank and Jamii Bora. The ability of MFIS to collect deposits has some advantages, especially as the pool for alternative funding shrinks. A vast majority of MFIs in Kenya are informal and unregulated, which has limited their funding sources further weakening their institutional capacity to supply microfinance services and limits their ability to grow (Matu, 2008). His data for the study included HMFIs in Kenya especially those affiliated to AHMFI (Africa Housing Microfinance Initiative). They included Jamii Bora, Equity Bank, Faulu Kenya, SISDO, Jitegemee Credit Scheme, Micro Kenya Limited, Kenya Finance Trust Co-operative bank, CIC insurance, K-rep bank Limited, Aga khan Foundation among others. While Kenya has 250 organizations that practice some form of microfinance business, only 20 practice pure Microfinance, of which 4 are deposit taking and 16 are credit only. The remaining 230 MFIs in Kenya are classified into three different tiers, with the first tier being deposit-taking institutions such as bank, the second tier being credit only facilities and the third tier being informal organization supervised by an external agency other than the government. These distinct classifications have led to some of the MFIs specializing in certain niche markets as housing micro loans, which have contributed to their growth and sustainability in delivering microfinance. For example, the ability to collect deposits has enabled Equity Bank to appeal to those excluded by the high costs of accessing traditional banks, while Jamii Bora has identified itself as the financial provider to former thieves and beggars (Matu, 2008).

According to Mwangi and Brown (2005) on their study entitled "Overview of the outreach and financial performance of HMFIs in Africa", HMFIs still face many challenges. Operating and financial expenses are very high, and on average, revenues remain lower than in other global. Efficiency in terms of cost per borrower is lowest for African HMFIs. The HMFIs for the study were grouped according to regions. Kenyan HMFIs were categorized under East African which among other countries which included Ethiopia, Tanzania and Uganda. This formed 42% of the HMFIs for the study. The main questions were how performances of African HMFIs sector compare with

global peers and how performance varies among African HMFIs. The African HMFIs were examined through the lens of standard performance metrics over a series of variables: outreach (breadth and depth), financial structure, financial performance, efficiency and portfolio at risk. Among the African HMFIs that provided information for the study, 47% post positive unadjusted returns. Regulated HMFIs report the highest return on assets on asset of all HMFI types averaging around 2.6% as compared to unregulated HMFIs. The findings also show that African HMFIs fund only 25% of assets with equity. HMFIs finance their activities with funds from various sources both debt and equity (Mwangi and Brown 2005).

According to George Omino (2005) on his study entitled "Regulation and supervision of MFIs in Kenya" HMFIs have faced a number of constraints that need to be addressed to improve outreach and sustainability. The major impediment to the development and performance is lack of specific legislation and set of regulations to guide the operations of the microfinance sub sector. MFIs have operated without an appropriate policy and legal framework. This has contributed to a large extent to the poor performance and eventual demise of many MFIs. This has had a bearing on a number of other constraints faced by the industry namely; diversity in institutional form, inadequate governance and management capacity, limited outreach, limited access to funds and lack of performance standards.

Regarding indicator of financial sustainability, Khandker et, al. (1995) pointed out that loan repayment (measured by default rate) could be another indicator for financial sustainability of MFIs; because, low default rate would help to realize future lending. Meyer (2002) noted that the poor needed to have access to financial service on long-term basis rather than just a onetime financial support. Short-term loan would worsen the welfare of the poor (Navajas et al., 2000).

## 2.5 Summary and Conceptual Framework

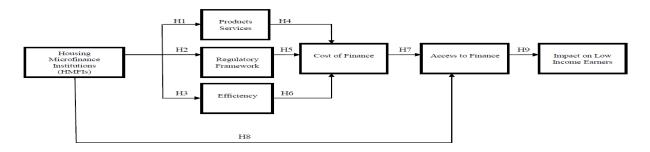
### 2.5.1 Summary

In this section we have reviewed some recent theoretical and empirical work on housing microfinance. Our goal has been not to provide a comprehensive survey of the literature but to highlight the main themes and their inter connections. The literature review address that lending for housing microfinance remains a nascent activity in many markets. It's also explaining the economic and social opportunities that housing microfinance presents for low income earners in developing countries. HMF has an important role to play in the context of a comprehensive country level housing finance strategy especially for those who do not meet the requirements for the mortgage market. HMF should be the key product when poor and low income earning families seek to build a shelter or improve the condition of their existing homes.

However to permit an effective development of HMF, some challenges need to be addressed. Moreover, MFIs have approached HMF lending tentatively due to operational risks as well as refinancing limitations that may cause asset/liability mismatch problems or simply take up too much liquidity. The other concern is the high rate of interest charged by MFIs to their clients mostly low income earners. This reality should be recognized by policy makers, who may lower income households, notably when subsidies are also provided. On the other side, the creation of appropriate systems of land use administration, management and tenure security that facilitate HMF still requires greater work and lobbying across Kenya. This include legislative and policy reform to allow for and even encourage HMF product.

#### **2.5.2 The Conceptual Framework**

Based on the literature review and the overall objective of the research, a conceptual framework was developed. This framework shows the variables that are pertinent for financial access to housing microfinance by low income earners in Kenya.



#### **Figure 2: Conceptual framework**

#### 5.2.3 Hypothesis

The conceptual suggests the following hypothesis:

- H1: The products and services design is critical for HMFIs performance.
- H2: The regulatory framework is critical for HMFIs performance.
- H3: HMFIs efficiency is critical for their performance.
- H4: The products and services design has an impact on the cost of finance.
- H5: The regulatory framework has an impact on the cost of finance.
- H6: HMFI's efficiency has an impact on the cost of finance.
- H7: The cost of finance has an impact on access to housing microfinance.
- H8: HMFIs have an impact in access to finance for low income earners.
- H9: The access to housing microfinance has a positive impact on low income earners.

### CHAPTER THREE RESEARCH METHODOLOGY

# **3.1 Introduction**

This chapter outlines the research methodology that was used to carry out the study. It starts with section 3.2 which discuss the research design and hypothesis testing research design. Section 3.3 presents the target population, the sample size and the sampling design. Section 3.4 presents data and data collection instruments. Section 3.5 presents the data analysis.

# **3.2 Research Design**

There are two types of research: quantitative and qualitative. The purpose of quantitative research is to evaluate objective data consisting of numbers while qualitative research deals with subjective data that are produced by the minds of respondents or interviewees *i.e.* human beings (Welman et al, 2001). This study was based on an exploratory design. A mixed qualitative-quantitative method will be used in data analysis. Mixed-method research works particularly well for exploratory research since it allows the researcher to take the rich empirical data yielded from subjects and apply either quantitative or qualitative methods to the data. In this manner, qualitative data can be qualitized or quantitative data can be qualitized to extract meaning from the data sets that might otherwise be hidden (Kitchenham, 2009).

## **3.3 Population**

The population consists of the study's subjects, who are individuals, groups, organizations, humans, products, and events, or the conditions to which they are exposed (Welman et al, 2005). The target population comprised MFIs in Kenya which provide

housing micro loans that are registered with the Association of Microfinance Institutions of Kenya (AMFI) which were 14 by 2013. Given that the number is not so large, no sampling shall be made. This was therefore be a census of all the 14 housing microfinance institutions.

### **3.4 Data and Data Collection Instruments**

The study used both primary and secondary data sources. Secondary data was drawn from the financial statements of housing microfinance institutions in Nairobi from 2008-2013. Primary data was collected using open-ended questions during interviews and structured questionnaires and helped in explaining different conclusions based on previous studies that have been conducted and concluded.

## **3.5 Data Analysis**

Data analysis usually involved reducing accumulated data to manageable levels, developing summaries, looking for patterns and applying statistical techniques (Schindler, 2002).

### **3.5.1 Conceptual Model**

The study examined the effect of cost of finance on access housing microfinance. The variables in the study are classified into dependent and independent variables. The relationship between the variables is stated using a mathematical function. Cost of finance is represented by Z and access to housing microfinance is represented by Y.

 $Z = f(X_1, X_2, X_3, X_4)$ 

Where Z is the dependent variable and X1, X2, X3 and X4 are independent variables

Therefore: Y=f(Z)

Where:

X1=Product design (loan size, interest rate, loan tenure and collateral)

X<sub>2</sub>=Regulatory framework (licensing fees and tax)

X<sub>3</sub>=Efficiency (Operation and administration cost, loan loss rate, subsidies and profitability).

X<sub>4</sub>= Cost of funds

A positive relationship between the dependent and the independent variable is expected. Dehejia, Montgomery, and Morduch (2005), using data from a micro credit cooperative in Dhaka, and Karlan and Zinman (2007), using data from a South African consumer lender, both find rather high elasticities of loan demand with respect to interest rates, that is, loan demand decreases as interest rates increase.

#### **3.5.2 Analytical Model**

This is the algebraic expression of the conceptual model. An analytical model of a linear multiple regression equation of the form shown below will be developed.

Where:

 $\alpha = \text{Constant}$ 

- $\beta$  = Slope of line
- e1= Error term

The access to credit by low income earners was measured by way of having computation of the number and type of clients, and the size of housing microloans over a period of five years from 2008 to 2013 and to find the relative rate of growth in comparison with the cost of finance. The independent variables were measured using the number, the type, the pricing of products and services offered, the cost of regulatory requirements, the operation and administration costs, the cost of funds, the profitability and the subsidies.

Significance of product design, regulatory framework and efficiency variables as predictors of financing cost were tested using the t-test. The significance of the overall model in explaining access to housing microfinance through the independent variables were measured through the f-test. The analyzed data will be then presented using tables. A correlation analysis was also performed to find how the variables are related to each other in the model.

## CHAPTER FOUR DATA ANALYSIS, RESULTS AND DISCUSSION

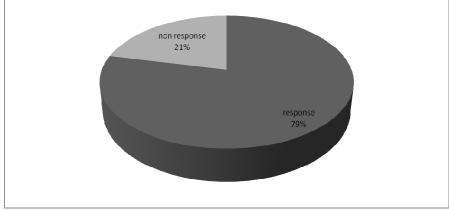
# **4.1 Introduction**

This chapter presents the findings of the analysis from the data collected. Section 4.2 presents summery statistics where the findings are presented in tables, charts and graphs. Section 4.3 presents the effects of financing cost on credit access. The section 4.4 presents the discussion.

## 4.1.1 Response Rate

The study targeted the 14 housing microfinance institutions in Kenya. Out of the targeted 14 respondents only 10 responded. This translated to a response rate of 79%. According to Mugenda and Mugenda (2003) the statistically significant response rate should be at least 50%.





Source: (Research Data, 2014)

# **4.2. Summary Statistics**

# 4.2.1 Demographic Information

# 4.2.1.1 Career Title

The study sought to establish the career title of the respondents. The findings are shown in the table 4.1

## Table 4.1: Career Title

	Frequency	Percentage
Manager	2	18
Head of department	1	9
Supervisor	2	18
Consultant	2	18
Others staff	4	36
Total	11	100

**Source: (Research Data, 2014)** 

The respondents who were managers were 18%, another 18% of the respondents were supervisors and consultants. Of the respondents 9% were heads of departments and 36% of the respondents were other staff.

# 4.2.1.2 Years of Experience in the Field

The respondents were asked the number of years they had experience in the field. The

responses are shown in the table 4.2.

	Frequency	Percentage
Less Than 2 Years	1	9
2-5 Years	1	9
6-8 Years	4	36
9-11 Years	3	27
Above 11 Years	2	18
Total	11	100

**Source: (Research Data, 2014)** 

The respondents that had less than 2 years experience were 9%, and another 9% had experience for 2-5 years. 36% had 6-8 years experience, 27% had 9-11 years while 18% had over 11 years experience.

### **4.2.2 Product Design**

### **4.2.2.1 Low Income Earners Consumption**

The respondents were asked to what extent they had a good level of understanding of low income earners consumption behavior.

	Frequency	Percentage
Very Great Extent	3	27
Great Extent	5	45
Moderate Extent	1	9
Little Extent	2	18
Total	11	100

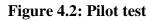
 Table 4.3: Understanding of Low Income Earners Consumption Behavior

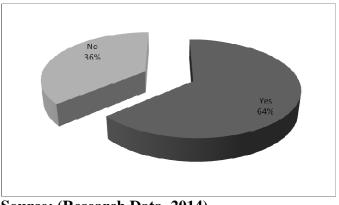
**Source: (Research Data, 2014)** 

The respondents that said they understood the consumption behavior of low income earners to a very great extent were 27%, those who said to a great extent were 45%, 9% said to a moderate extent and 18% said to a little extent. According to Daphnis (2004) suggested that the first step in product design involves a market assessment. Through this surveys then the company gets to understand the behavior of its customers.

#### 4.2.2.2 Pilot Test/ Surveys

The study sought to establish whether the organization always carries out a pilot test/ survey before launching a housing micro credit. The chart below shows the findings.





Source: (Research Data, 2014)

The organizations that carry out pilot tests before launching a housing micro credit were 64% while those that did not were 36%. There is need to conduct surveys and pilots tests so as to understand the consumer, their income and demands of the products (Daphnis, 2004)

# **4.2.2.3 Appraisal Factors**

The respondents were asked to rate the extent to which the appraisal factors are key in designing the housing micro loan. The responses are in table:

Factors	Mean	Std. Dev
Capacity/source of repayment	1.231	0.214
The purpose of the loan (Type of product)	1.598	0.325
Security/ Risk mitigation	1.222	0.422
The profession of the client	3.4221	0.632
A market survey on potential clients	1.345	0.852
Location of the borrower	3.982	0.336
Loan tenure	2.362	0.153
Economic environment	2.864	0.362
Institution business objectives	2.621	0.335
Subsidies/ Assistance benefited by the institution	2.114	0.663
Source: (Research Data, 2014)		

## **Table 4.4: Appraisal Factors**

The extent to which capacity/source of repayment is key in designing the housing micro loan is to a very great extent with a mean of 1.231. One of the reasons for carrying out market assessment tests is to identify the customers ability to make the loan repayment (Daphnis, 2004).The purpose of the loan (Type of product) is key in designing the housing micro loan to a great extent with a mean of 1.598. Security/ Risk mitigation is key in designing the housing micro loan to a very great extent as indicated by a mean of 1.222. Daphins (2004) indicated that companies can mitigate these risks by ensuring that the clients have guarantees and collateral. The respondents indicated to a moderate extent that the profession of the client was a key aspect in key in designing the housing micro loan to a moderate extent with a mean of 3.4221. Kihato (2013) stated that it was important for MFIs to consider the profession of the customer and their source of income.

On whether the market survey on potential clients was key in designing the housing micro loan, the respondents indicated to a very great extent by a mean of 1.345. Market surveys enable the organization to understand its customers, their income consumption behaviors and demand (Daphnis, 2004). The location of the borrower was important to a little extent in designing the housing micro loan by a mean of 3.982. The loan tenure scored a mean of 2.362 an indication that it was key in designing the housing micro loan to a great extent. Kihato (2013) established that affordability ratios were used including the loan tenure. His survey established that HMF used terms ranging from one to eight years as the repayment period. The economic environment scored a mean of 2.864 and thus was key in designing the housing micro loan to a moderate extent. On the Institution business objectives, the respondents said it affected the designing of the micro loan to a moderate extent by a mean of 2.621. On the extent to which subsidies/ Assistance

benefited by the institution, the respondents indicated to a great extent with a mean of

2.114.

### 4.2.2.4 Determinants of Pricing

The respondents were asked whether the following factors were determinants of pricing.

The responses are shown in Table 4.5

Factors	Mean	Std. Dev
Cost of funds of the institution	3.982	0.221
Operation and administration cost of the institution	4.231	0.154
Risk associated with the borrower	4.566	0.362
Guarantees and collateral on the transaction	4.021	0.452
Level of Non Performing Loan in the loan book (Loan losses)	4.442	0.661
Profitability of the institution	3.997	0.654
Subsidies benefited by the institution	4.021	0.554
Loan tenure	4.551	0.362
Construction assistance service	4.668	0.442
Economic environment	4.021	0.451

**Table 4.5: Determinants of Pricing** 

Source: (Research Data, 2014)

As indicated in table 4.5, the respondents agreed that the cost of funds of the institution was a determinant of the price with a mean of 3.982 and that the operation and also agreed that administration cost of the institution was also a determinant of pricing by a mean of 4.231. According to Daphnis (2004) High operating costs and capital constraints within the MFI industry impact the pricing of housing microfinance services .Whether the risk associated with the borrower, the respondents strongly agreed with a mean of 4.566. The respondents agreed that guarantees and collateral on the transaction were determinants of pricing to a great extent with a mean of 4.021. Different Microloans have different rates and thus different risks. Daphnis (2004) stated that in order for MFIs to

cushion themselves against this risk by demanding collaterals and guarantees from the clients.

On the level of Non Performing Loan in the loan book (Loan losses), the respondents agreed with a mean of 4.442. The respondents agreed that profitability of the institution to a mean of 3.997 and that subsidies benefited by the institution were also a determinant of pricing to a great extent with a mean of 4.021. Whether the loan tenure was a determinant of pricing, the respondents strongly agreed with a mean of 4.551. Kihato (2013) appropriated that majority MFI use ratios so as to determine the loan tenure while designing the product. Asked whether construction assistance service was a determinant of pricing the respondents strongly agreed with a mean of 4.668 and also agreed that economic environment was a determinant of pricing with a mean of 4.021.

### **4.2.2.5 Loan Performance**

The respondents were asked to what extent a performing loan highly depends on the product design. The responses are in Table 4.6

	Frequency	Percentage
Very Great Extent	5	45
Great Extent	3	27
Moderate Extent	2	18
Little Extent	1	9
Total	11	100

#### Table 4.6: Loan Performance

#### Source: (Research Data, 2014)

The respondents who indicated that loan performance depends on the product design to a very great extent were 45%, 27% indicated to a great extent, 18% indicated to a moderate extent, and 9% indicated to a little extent. Raven Smith (2006) highlighted that loan portfolio played an important role in determining whether the product design was

successful or not.

## 4.2.2.6 Cost of Finance

The study sought to establish the extent to which the product design impacts the cost of finance for the institution. Findings are in table 4.7

## Table 4. 7: Cost of Finance

	Frequency	Percentage
Very Great Extent	3	27
Great Extent	5	45
Moderate Extent	3	27
Total	11	100

Source: (Research Data, 2014)

The respondents who indicated that the product design impacts the cost of finance to a very great extent were 27%, 45% indicated to a great extent and another 27% indicated to a moderate extent. Daphnis (2004) also noted another and crucial factor in HMF product design consists of guarantees and collateral based on the high on-going costs incurred by the institution in its operations.

## **4.2.2.7 HMFIs Business Performance**

The study sought to establish the extent to which the products design is critical for HMFIs business performance. Table 4.8 shows the responses

	Frequency	Percentage
Very Great Extent	4	36
Great Extent	3	27
Moderate Extent	1	9
Little Extent	2	18
No Extent At All	1	9
Total	11	100

**Table 4.8: HMFIS Business Performance** 

Source: (Research Data, 2014)

From the findings, the respondents who indicated that products design is critical for HMFIs business performance to a very great extent were 36%, 27% indicated to a great extent, 9% indicated to a moderate extent, 18% indicated to a little extent and another 9% indicated to no extent at all.

## 4.2.3 Regulatory Framework

### 4.2.3.1 Laws Governing

The respondents were asked what laws governed their microfinance institution. The responses are shown in the table below.

#### Table 4. 9: Laws Governing

	yes		no	
	f	%	f	%
The Non-Governmental Organizations Co-ordination Act	10	91	1	9
The Building Societies Act	11	100	0	0
The Trustee Act	11	100	0	0
The Societies Act	11	100	0	0
The Co-operative Societies Act	11	100	0	0
The Companies Act	9	82	2	18
The Banking Act	9	82	2	18
The Kenya Post Office Savings Bank (KPOSB) Act	8	73	3	27
Source: (Research Data, 2014)				

The MFIs that are governed by the Non Governmental Organizations Co-ordination Act are 91%, 82% by the companies act, another 82% by the banking act and 73% by the Kenya post office savings bank. All the MFIs said they were governed by the Building Societies Act, the Trustee Act, the Societies Act and the Co-operative Societies Act. Since the microfinance act become operational in 2008, different MFIs are governed and regulated by different bodies and their acts (CBK, 2008).

#### 4.2.3.2 Institution Supervision

The respondents were asked whether there was a body that supervises the institution. All the institution stated yes an indication that there was a body that supervises their institution. The Microfinance Act became operation in 2008 and sets out the legal, regulatory and supervisory framework for the microfinance industry in Kenya. The principal object of the Act is to regulate the business and operations of microfinance institutions (MFI) in Kenya through licensing and supervision (CBK, 2008).

### 4.2.3.3 Laws and Regulatory Requirements and Cost

The study sought to establish what the effects of such laws and regulatory requirements were to the institution's operations cost. The responses given were that the laws imposed costs on the institution in form of licensing fees, interest rate caps and expenses in the monitoring and administration of the required regulations across all the branches. Singh (2005) highlighted the microfinance's face administrative and operational costs in trying to implement the regulatory laws across its different branches.

### 4.2.3.4 Regulatory framework and cost of finance

The respondents were asked to indicate the extent to which the regulatory requirements impact the cost of finance for the institution. The responses are shown in the table 4.10.

	Frequency	Percentage
Very Great Extent	6	55
Great Extent	3	27
Moderate Extent	1	9
Little Extent	1	9
	11	100

 Table 4.10: Regulatory Framework and Cost of Finance

Source: (Research Data, 2014)

The respondents that said that the regulatory requirements impacted the cost of finance to a very great extent were 55%, 27% said to a great extent, 9% said to a moderate extent and another 9% said to a little extent. According Harris (2010), regulation has many obvious advantages however it can come at a price as cost of supervision to the institution.

#### 4.2.3.5 Government policies

The study sought to establish to what extent the Government policies on operations contributes to the sustainability of the institution. Table 4.11 shows the responses

	Frequency	Percentage
Very Great Extent	4	36
Great Extent	2	18
Moderate Extent	3	27
Little Extent	2	18
	11	100

### Table 4.11: Government Policies

#### **Source: (Research Data, 2014)**

The respondents that said that government policies contribute to the sustainability of the institution to a very great extent were 36%, 18% said to a great extent, 27% said to a moderate extent and 18% said to a little extent. The principal objective of the governing bodies is to regulate the business and operations of microfinance institutions (MFI) in Kenya through licensing and supervision. This ensures that that the businesses remain afloat with time due to the regulations they have to follow (CBK, 2008).

#### 4.2.3.6 Subsidies

The respondents were asked whether the institution enjoy subsidies or technical assistance from the regulatory authorities. All the institutions said that they enjoyed subsidies and technical assistance from the regulatory authorities. Nawaz (2010)

concluded that microfinance needs to perform without subsidy finance in order to be able to expand as market conditions permit

### 4.2.4 Efficiency

### **4.2.4.1 Institutions Clients**

The study sought to establish how many clients the institutions had by the end of 2013.

Table 4.12 shows the results.

### **Table 4.12: Institutions Clients**

	Frequency	Percentage
Less Than 50	1	9
101 To 150	1	9
151 To 200	2	18
More Than 200	7	64
Total	11	100

Source: (Research Data, 2014)

The institutions that had less than 50 clients by 2013 were 9%, another 9% had between 101-150 clients, 18% had between 151-200 clients and 64% of the institutions had more than 200 clients by the end of 2013. Havers (1996) concluded that one of the measures of MFIs efficiency was its number of clients. The number of customers an organization has is a reflection of the relevance of the products it offers to the market.

## 4.2.4.2 Loan Monitoring Officer

The study sought to establish how many loans origination/monitoring officer the institution had employed by the end of 2013. Table 4.13 shows the responses.

**Table 4.13 Loan Monitoring Officer** 

	F	%
Less Than 5	3	27
5 To 10	2	18
11 To 15	4	36
More Than 16	2	18
Total	11	100

Source: (Research Data, 2014)

The institutions that had less than 5 monitoring officers employed by 2013 were 27%, 18% had 5-10 officers, 36% had 11-15 officers and another 18% had more than 16 officers. Farrington (2000) identifies a number of accounting variables to reflect the efficiency of the microfinance institutions. Among this variables are the number of loan officers.

## 4.2.4.3 Institution Staff

The study sought to determine how many staff the institution had employed by the end of 2013.

Table 4. 14: Instituti	ional Staff
------------------------	-------------

	F	%
Less Than 10	1	9
11 To 20	3	27
21 To 25	2	18
26 To 30	3	27
More Than 30	2	18
Total	11	100

### Source: (Research Data, 2014)

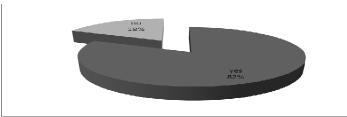
The institutions that had less than 10 employees were 9%, 27% had between 11-20 employees, 18% had between 21-25 employees, 27% had 26-30 employees by 2013 and 18% had more than 30 employees.

There are different variables that are a reflection of the efficiency of the firm Farrington (2000) identified the number of staff as a key variable used in determining the efficiency of a firm.

# 4.2.4.4 Other Branches

The study sought to establish whether the organization had other branches in other parts of Nairobi. Figure 4.3 shows the responses





Source: (Research Data, 2014)

The institutions that had branches outside Nairobi were 82% while 18% did not have branches outside Nairobi. The size of the firm which can be indicated by the number of branches it has can also be used as a measure of the efficiency of the firm (Farrington, 2000).

# 4.2.4.5 Factors Influence the Efficiency /Sustainability

The study sought to establish the extent to which the following factors influenced the efficiency of the institution. The findings are in Table 4.15

Factors	Mean	Std. Dev
The Number Of Costumers The Institution Has	1.224	0.021
The Quality Of The Loan Portfolio	2.345	0.145
The Level Of Recovery Performance	1.562	0.324
Profitability Of The Institution	1.231	0.474
Management Performance	1.624	0.221
Cost Of Funds	1.221	0.452
Operation And Administration Expenses	1.472	0.752
Subsidies And Technical Assistance From Donor	3.221	0.254
The Geographical Coverage Of The Institution	2.421	0.345
Technology	1.982	0.224
Qualification /Motivation Of Staff	1.144	0.152

 Table 4.15: Extent of Influence of Factors Influencing Efficiency

The extent to which the Number of Costumers the Institution has influences the efficiency of the institution scored a mean of 1.224 an indication that it did to a very great extent. Havers (1996) concluded that one of the measures of MFIs efficiency was its number of clients. The Quality of the Loan Portfolio scored a mean of 2.345 an indication it did affect to a great extent. The loan portfolio of any MFI is an indication of a good product design and also an indication of the organizations efficiency (Havers, 1996). On the Level of Recovery Performance, scored a mean of 1.562 an indication it influenced to a great extent. On the profitability of the institution, the respondents indicated that it affected to a very great extent with a mean of 1.231. One of the parameters of measuring the efficiency of an MFI according to Farrington (2000) is the profitability of the organization.

On the management performance, the respondents said it affected to a great extent with a mean of 1.624. The cost of funds scored a mean of 1.221 an indication it affected to a very great extent. Daphnis (2004) concluded that MFIs incur costs not only in sourcing funds and disbursement of these funds to microfinance clients but also in promotion and

monitoring of microfinance client groups and development of processes for improving efficiencies of service delivery. On the extent of influence of operation and administration expenses, the respondents said to a very great extent with a mean of 1.472. High operating costs of running the operations of MFIs are a reflection of an inefficient system. Daphnis (2004) cited that MFIs need to come up with measures to reduce the high operating costs incurred. Subsidies and technical assistance from donor scored a mean of 3.221 an indication it influenced efficiency moderately while the Geographical

Coverage of the Institution scored a mean of 2.421 an indication it affected to a great extent.

Nawaz (2010) concluded that micro finances needs to perform without subsidy finance in order to be able to expand as market conditions permit. On technology respondents said it influenced efficiency to a great extent with a mean of 1.982 and the qualification /Motivation of Staff to a very great extent with a mean of 1.144. One of the variables used to measure the efficiency of a firm is the members of staff. Highly qualified and motivated members of staff are increasing the efficiency of the service delivered to customers (Farrinton, 2000).

#### 4.2.5 Overall Impact

The study sought to establish the rank of the extent to which above factors are determinant in the finance cost by Housing Microfinance Institutions.

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Factors	F	%	
Product Design	4	36	
Regulatory Requirements	4	36	
Profitability	3	27	

### **Table 4.16: Rank of Impact**

Source: Field Research, 2013

The respondents that said the product design had the most impact on the finance cost by Housing Microfinance Institutions were 36%, another 36% said regulatory framework and 27% said the profitability. Farrington (2000) highlighted different variables that have an impact on the finance cost and key among them was the product design. He also cited that MFIs incur costs in trying to implement and monitor the regulatory laws across its different branches. The profitability of a firm is an indication of the efficiency of the firm Daphnis (2004) highlighted that in order to increase the profitability firms need to reduce the cost incurred in its operations.

### 4.2.6 Customers Questionnaires

### 4.2.6.1 Customers Response Rate

The study targeted 10 respondents per MFI. Out of the targeted 140 clients only 82 questionnaires were filled and returned. This translated to a response rate of 59%. According to Mugenda and Mugenda (2003) the statistically significant response rate should be at least 50%.

## **Figure 4.4: Customer Response Rate**



Source: (Research Data, 2014)

# **4.2.6.2** Profession of the Respondent

The study sought to establish the profession of the respondents. Table 4.17 shows the

responses

<b>Table 4.17:</b>	Profession	n of the	e Customers	

	F	%
Civil Servant	15	18
Employee In Private Sector	16	20
Sole Trader	12	15
Farmer Worker	5	6
Retail Dealer	18	22
Unskilled Wage Laborers	16	20
Total	82	100

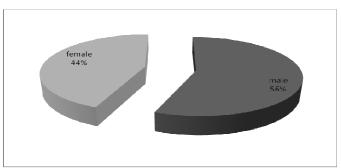
Source: (Research Data, 2014)

The respondents who were civil servants were 18%, 20% of the respondents were employees in the private sector, 15% were sole traders, 6% were farm workers, 22% were retail dealers and 20% were unskilled wage laborers. The study involved customers that had different professions an indication that MFI served customers with different professions.

## **4.2.6.3 Gender of the Respondents**

The respondents were asked to indicate their gender. Figure 4.5 shows the responses:







The respondents who were male were 56% while the female respondents were 44%. Both male and female were involved in the study an indication that MFIs served both male and female clients although the majority were males.

# 4.2.6.4 Access to Housing Micro Loan

The respondents were asked whether MFH fund was adequate to meet their housing requirement. All the respondents said that the funds they accessed were adequate to meet their housing needs.

## **4.2.6.5 Decline in expenditure**

The study sought to establish how much was the decline in expenditure on housing after utilization of MFH. The responses are shown in table 4.18

	Frequency	Percentage
<10%	12	15
10-20%	18	22
20-30%	15	18
30-50%	18	22
>50%	19	23
	82	100

**Table 4.18: Decline in Expenditure** 

Source: (Research Data, 2014)

Those respondents who said that the expenditure declined by less than 10% were 15%, 22% said it had declined by 10-20%, 18% said it had declined by 20-30%, 22% said it had declined by 30-50% and 23% said it had declined by more than 50%. According to CGAP (2009) access to micro loans from the MFIs helps in reduction of the costs.

## 4.2.6.6 Repayment

The study sought to establish the clients' source of repayment for the loans. The findings are shown in table 4.19

	Frequency	Percentage
Agriculture Income	17	21
Income From Regular Job	16	20
Wage Labour	18	22
Non-Farm Income	10	12
Remittance	13	16
Loan From Bank/Cooperative/MFI	8	10
Total	82	100

 Table 4.19: Source of Repayment for the Loans

Source: (Research Data, 2014)

The respondents who said that their source of loan repayment was from agricultural income were 21%, 20% said income from regular job, 22% from wage labour, 12% from non-farm income, 16% from remittance and 10% said they would pay from banks/cooperatives/MFIs. About 30 % of low income households have regular income stream that can pay off a monthly amortizing housing loan (NHBI, 2011).

#### 4.2.6.7 Factors Constraining Access

The respondents were asked the extent to which the factors below constrained the access to housing micro credit.

Constraints	Mean	Std. Dev
Non-Availability of formal housing loan	1.231	0.152
Inadequate Quantity of formal loan	2.421	0.234
Non availability of Loan for furnishing	1.521	0.542
Delay in Loan processing/disbursement	1.456	0.224
Availability Guarantor	1.242	0.634
High Interest Rate	1.463	0.124
Loan period	2.456	0.632
Inflexible Timing of EMI repayment	2.421	0.452
Deposit of EMI/Receipt/	2.441	0.331
Lack of regular income/fund	1.245	0.143
Landlessness	1.542	0.231
Problem related to Land ownership/title	1.422	0.442
Lack of Collateral/Guarantor for loan	1.231	0.634
No or low subsidy	2.432	0.752
No construction assistance	1.621	0.354
Source: (Research Data 2014)		

Source: (Research Data, 2014)

As indicated in table 4.20, the respondents strongly agreed that Non-Availability of formal housing loan influenced their access to loans with a mean of 1.231. The respondents agreed that inadequate quantity of formal loan influenced loan accessibility with a mean of 2.421. The respondents further agreed that non availability of Loan for furnishing influences accessibility with a mean of 1.521 and they strongly agreed that delay in Loan processing/disbursement influences accessibility with a mean of 1.456. On whether availability guarantor and high interest rate influence the accessibility of loans, majority of the respondents strongly agreed with a mean of 1.242 and 1.463 respectively.

The respondents agreed on whether the loan period, Inflexible Timing of EMI repayment and Deposit of EMI/Receipt/ influences accessibility to loans with a mean of 2.456, 2.421and 2.441 respectively. Kihato (2010) established that the Tenure of the loan repayment period is key in granting the loan to the customers so as to enable profitability of the firm. The respondents strongly agreed that lack of regular income/fund influences accessibility to loans with a mean of 1.245. According to chiquer & Michael (2009) low income earners lack regular income fund and thus find it hard to access loans due to the lack of enough collateral and guarantors. On whether landlessness influences the accessibility of loans, majority of the respondents agreed with a mean of 1.542, they strongly agreed that problem related to Land ownership/title and Lack of Collateral/Guarantor for loan influences accessibility of loans with a mean of 1.422 and 1.231 respectively.

Regarding the statement as to whether No or low subsidy influences accessibility of loans, majority of those interviewed agreed with a mean of 2.432.On whether No construction assistance influences accessibility of loans, the respondents agreed with a mean of 1.621. These findings are consistent with those of Chiquier & Lea (2009) who established that very few mortgage lenders reached down to finance low income household. Low income households may not have enough collateral such as land and may also lack guarantors and thus MFIs are not willing to take this risk on them.

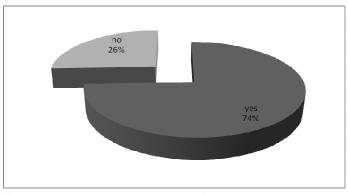
#### 4.2.6.8 Housing Plan

The study sought to find out whether the respondents had any housing plan prior to availing this MFH. All the respondents said that they had a housing plan.

#### 4.2.6.9 MFH and housing activities

The respondents were asked whether MFH has induced customers to plan for their housing activities:

**Figure 4.6: MFH and Housing activities** 



Source: (Research Data, 2014)

The respondents that said that MFH has induced customers to plan for their housing activities were 74% while 26% said no.

### 4.2.6.10 Microloan and Social Condition

The study sought to establish whether the housing micro loan had contributed to improve the social condition of the respondents. All the respondents agreed that the microloan had improved their social condition. Markowski (2002) states MFIs have a mission: a social mission "to provide financial services to large numbers of low income persons to improve their welfare"

# 4.3 Effects of Financing Cost on Credit Access

### **4.3.1 Results of Correlation Analysis**

		Access to	Product	Regulatory	Efficiency	Cost	of
		credit	design	framework		funds	
Access to	Pearson	1					
credit	Correlation						
	Sig. (2-tailed)						
Product	Pearson	.693	1				
design	Correlation						
	Sig. (2-tailed)	.002					
Regulatory	Pearson	.743	.822	1			
framework	Correlation						
	Sig. (2-tailed)	.000	.005				
Efficiency	Pearson	.794	.543	.793	1		
	Correlation						
	Sig. (2-tailed)	.002	.022	.006			
Cost of	Pearson	.602	.633	.788	.992	1	
funds	Correlation						
	Sig. (2-tailed)	.003	.003	.321	.043		

**Table 4.21: Correlation Analysis** 

The data presented before on access to credit, product design, regulatory framework, efficiency and cost of funds were computed into single variables per factor by obtaining the averages of each factor. Pearson's correlations analysis was then conducted at 95% confidence interval and 5% confidence level 2-tailed. The table 4.21 indicates the correlation matrix between the factors (product design, regulatory framework, efficiency and cost of funds) and access to credit. According to the table, there is a positive relationship between product design and access to credit, Regulatory framework, efficiency and cost of funds of magnitude 0.693, 0.743, 0.794 and 0.602 respectively. The positive relationship indicates that there is a correlation between the factors and the access to credit with Efficiency having the highest value and Cost of funds having the lowest correlation value.

This notwithstanding, all the factors had a significant p-value (p<0.05) at 95% confidence level. The significance values for relationship between access to credit and product

design, regulatory framework, efficiency and cost of funds were 0.002, 0.000, 0.002 and 0.003 respectively. This implies that Regulatory framework was the most significant factor, followed by Product design and Efficiency then Cost of funds.

4.3.2 Results of the Model Goodness of Fit

Model	R	R Square	Adjusted R Square	Std. Error of the
				Estimate
1	.767	.588	.572	0.674

a. Predictors: (Constant), Product Design, Regulatory Framework, Efficiency, Cost of funds.

In addition to descriptive analysis, the study conducted a multiple regression to establish the consolidated effects of the independent variables on the dependent variable. Table 4.21 above shows a model summary of regression analysis between four independent variables including product design, regulatory framework, efficiency and cost of funds and a dependent variable access to credit. The table showed that value of R was 0.767; the value of R square was 0.588 and the value of adjusted R square was 0.572. From the findings, 58.8% of changes in the access to credit were attributed to the four independent variables in the study. Positivity and significance of all values of R shows that model summary is significant and therefore gives a logical support to the study model.

4.3.3 Results of Analysis Of Varian	ce
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Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	16.23	4	4.057	9.235	.003 <sup>b</sup>
Residual	9.22	87	0.105		
Total	25.55	91			

a. Dependent Variable: Access to credit

b. Predictors: (Constant), Product Design, Regulatory Framework, Efficiency, Cost of funds

The data findings were analyzed and the SPSS output presented in table 4.6 above. ANOVA statistics of the processed data at 5% level of significance shows that the value of calculated F is 9.235 and the value of F critical at 5% level of significance with numerator degrees of freedom 4 and denominator degrees of freedom 91 was 2.47 Since F calculated is greater than the F critical (9.235>2.47), this shows that the overall model was significant.

### 4.3.4 Estimated Model

Model	Unstandardized Coefficients				Standardized Coefficients	Т	Sig.
	B Std. Error		Beta				
(Constant)	1.227	1.205		1.0183	0.001		
Product design	0.922	4.632	0.861	0.19905	0.004		
Regulatory framework	0.724	2.524	0.485	0.2868	0.003		
Efficiency	0.987	1.982	0.498	0.498	0		
Financing cost	0.521	5.334	0.791	0.0977	0.001		

a. Dependent Variable: Access to credit

b. Predictors: (Constant), Product Design, Regulatory Framework, Efficiency, Financing Cost

From the regression findings, the substitution of the equation:

 $(Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4)$  becomes:

ROA=1.227+0.922X1+0.724X2+0.873X3+0.521X4

Where Y is the dependent variable (access to credit),  $X_1$  is Product design variable,  $X_2$  is

Regulatory framework, X<sub>3</sub> is Efficiency and X<sub>4</sub> is Cost of funds.

From the study findings, holding all variables constant at zero will lead to accessibility to credit of 1.227. However, a unit increase in product design will lead to 0.922 increases in the accessibility to credit among MFIs. Similarly, a unit increase in regulatory framework will lead to a 0.724 increases in the accessibility to credit among MFIs. A unit increase in efficiency will lead to 0.987 increases in the accessibility to credit among MFIs and finally, a unit increase in cost of funds will lead to 0.521 increase in the increases in the accessibility to credit among MFIs.

### **4.4 Discussions**

Pearson's correlations analysis was conducted at 95% confidence interval so as to establish the relationship between financial performance and green operations practices.

From the table there is a positive correlation between financial performance and the factors (Product Design, Regulatory Framework, Efficiency, Cost of funds) of magnitude 0.693 with product design, 0.743 with regulatory framework, 0.794 with efficiency and a magnitude of 0.602 with cost of funds respectively. The independent variables also had a positive significant correlation relationship with P-values of 0.002, 0.000, 0.002 and 0.003 respectively. A correlation coefficient value (r) ranging from 0.10 to 0.29 is considered to be weak, from 0.30 to 0.49 is considered medium and from 0.50 to 1.0 is considered strong.

From the model of fit table R-Square which is the coefficient of determination is a commonly used statistic to evaluate model fit. The adjusted  $R^{2}$ , is also called the coefficient of multiple determinations, is the percent of the variance in the dependent explained uniquely or jointly by the independent variables. Therefore 58.8% of the

changes in the access of credit can be attributed to the combined effect of the predictor variables. This means that 41.2% of the changes in the changes can be attributed to other factors.

The probability value of 0.003 indicates that the regression relationship was highly significant in predicting how the predictor variables influenced the dependent variables. The F critical at 5% level of significance was 2.5252 since F calculated is greater than the F critical (value = 9.235) thus showing that the model was significant.

## CHAPTER FIVE SUMMARY AND CONCLUSIONS

## **5.1 Introduction**

This chapter presents the summary and conclusions of the study. Section 5.2 presents discussions of the findings. Section 5.3 presents conclusion drawn from the findings and section 5.4 gives the recommendation made for the study.

## **5.2 Discussions**

Majority of the respondents understood the consumption behavior of low income earners. According to Daphnis (2004) suggested that the first step in product design involves a market assessment. Through this surveys then the company gets to understand the behavior of its customers. The findings also show that the product design impacts the cost of finance to a great extent. Daphnis (2004) also noted another and crucial factor in HMF product design consists of guarantees and collateral based on the high on-going costs incurred by the institution in its operations. The findings also revealed that the extent to which the capacity/source of repayment is key in designing the housing micro loan is to a great extent .One of the reasons for carrying out market assessment tests is to identify the customers ability to make the loan repayment (Daphnis, 2004).

The purpose of the loan (Type of product) and Security/ Risk mitigation is also key in designing the housing micro loan. Daphins (2004) said that companies can mitigate these risks by ensuring that the clients have guarantees and collateral. The profession of the client was a key aspect in key in designing the housing micro loan. Kihato (2013) stated that it was important for MFIs to consider the profession of the customer and their source of income. The findings also reveal that market survey on potential clients was key in

designing the housing micro loan. Market surveys enable the organization to understand its customers, their income consumption behaviors and demand (Daphnis, 2004). The location of the borrower was important to a little extent. The loan tenure scored was key in designing the housing micro loan to a great extent. Kihato (2013) established that affordability ratios were used including the loan tenure. His survey established that HMF used terms ranging from one to eight years as the repayment period.

The findings revealed that the cost of funds, administration cost of the institution was a determinant of the price of the institution. According to Daphnis (2004) High operating costs and capital constraints within the MFI industry impact the pricing of housing microfinance services. The findings also reveal that the risk associated with the borrower, guarantees and collateral on the transaction were determinants of pricing to a great extent. Different Microloans have different rates and thus different risks. Daphnis (2004) stated that in order for MFIs to cushion themselves against these risks by demanding collaterals and guarantees from the clients. Another determinant was the level of Non Performing Loan in the loan book (Loan losses) and the profitability of the institution. Kihato (2013) appropriated that majority MFI use ratios so as to determine the loan tenure while designing the product. The findings also reveal that the loan performance depends on the product design to a very great extent. Raven Smith (2006) highlighted that loan portfolio played an important role in determining whether the product design was successful or not. The MFIs carry out pilot tests before launching a housing micro credit. There is need to conduct surveys and pilots tests so as to understand the consumer, their income and demands of the products (Daphnis, 2004).

The findings also revealed that All the MFIs were being governed by the different acts and were supervised by the body they belonged to. Since the microfinance act become operational in 2008, different MFIs are governed and regulated by different bodies and their acts (CBK, 2008). The findings also revealed that the laws imposed costs on the institution in form of licensing fees, interest rate caps and expenses in the monitoring and administration of the required regulations across all the branches. Singh (2005) highlighted the microfinance's face administrative and operational costs in trying to implement the regulatory laws across its different branches. The government policies contribute to the sustainability of the institution. The findings also revealed that all the institutions said that they enjoyed subsidies and technical assistance from the regulatory authorities. Nawaz (2010) concluded that micro finances needs to perform without subsidy finance in order to be able to expand as market conditions permit.

The findings showed that the different micro finances had different number of clients, loan monitoring officers and members of staff. According to Farrington (2000) the number of clients, members of staff and monitoring officers are among the variables that are used in measuring the efficiency of an MFI.

The findings revealed that the extent to which the Number of Costumers the institution has influences the efficiency of the institution to a very great extent. Havers (1996) concluded that one of the measures of MFIs efficiency was its number of clients. The quality of the Loan Portfolio also did affect to a great extent. The loan portfolio of any MFI is an indication of a good product design and also an indication of the organizations efficiency (Havers, 1996). Other factors that were revealed to affect the efficiency of the MFI to great extent were Level of Recovery Performance and the Profitability of the Institution, One of the parameters of measuring the efficiency of an MFI according to Farrington (2000) is the profitability of the organization. The management performance also affects the efficiency of the MFIs to a great extent and the cost of funds to a very great extent. Daphnis (2004) concluded that MFIs incur costs not only in sourcing funds and disbursement of these funds to microfinance clients but also in promotion and monitoring of microfinance client groups and development of processes for improving efficiencies of service delivery. The influence of operation and administration expenses, was to a very great extent. High operating costs of running the operations of MFIs are a reflection of an inefficient system. Daphnis (2004) cited that MFIs need to come up with measures to reduce the high operating costs incurred. Subsidies And Technical Assistance from Donor influenced efficiency moderately while the Geographical Coverage of the Institution influences to a great extent. Nawaz (2010) concluded that micro finances needs to perform without subsidy finance in order to be able to expand as market conditions permit. Technology and and the qualification /Motivation of Staff influence the efficiency of a firm to a very great extent. One of the variables used to measure the efficiency of a firm is the members of staff. Highly qualified and motivated members of staff increase the efficiency of the service delivered to customers (Farrinton, 2000).

The findings revealed that all the customers interviewed had access to housing micro loans from the MFIs and that these micro loans reduced their expenditure. According to CGAP (2009) access to micro loans from the MFIs help in the reduction of the costs. The finding also reveals that majority of those who accessed the loans had different sources of income for the loan repayment. About 30 % of low income households have regular income stream that can pay off a monthly amortizing housing loan (NHBI, 2011). The study also establishes that there are various factors that affect the accessibility of loans.

The findings revealed that majority of the respondents strongly agreed that nonavailability of formal housing loan influenced their access to loans. The respondents agreed that inadequate quantity of formal loan and non availability of Loan for furnishing influenced loan accessibility. Farrington (2000) established that low income earners may lack all the necessary collateral and may also need help in all aspects of construction, a combination that made it a challenge for them to access loans. The study also revealed that the respondents strongly agreed that delay in Loan processing/disbursement influences accessibility. The study further revealed that availability guarantor and high interest rate influence the accessibility of loans

The study established that the loan period, inflexible timing of EMI repayment and deposit of EMI/Receipt/ influences accessibility to loans. Kihato (2010) established that the Tenure of the loan repayment period is key in granting the loan to the customers so as to enable profitability of the firm. The study also established that lack of regular income/fund influences accessibility to loans. According to Chiquier & Michael (2009) low income earners lack regular income fund and thus find it hard to access loans due to the lack of enough collateral and guarantors.

The study revealed that Landlessness, problems related to land ownership and lack of collateral/ Guarantor for loan influences the accessibility of loans These findings are consistent with those of Chiquier & Lea (2009) who established that very few mortgage lenders reached down to finance low income household. Low income households may

not have enough collateral such as land and may also lack guarantors and thus MFIs are not willing to take this risk on them.

## **5.3 Conclusion**

The study made the following conclusions.

The study concludes that MFIs conduct surveys to understand the consumer behavior before launching the product design. The study also concludes that MFIs take into account the purpose of the loan, the risk mitigation, the profession of the client, the loan tenure and the economic conditions during the product design. The study also concludes that the cost of funds of the institution, operations and administration costs, risks associated with the borrower and the loan tenure were the determinants of the price.

The study concludes that all MFIs are governed by different acts and are members of bodies that conduct supervision on the MFIs. The study also concludes that the law and regulatory requirements impose costs on the institutions. The study concludes that the government policies also enhance the sustainability of the finances and that the MFIs enjoy subsidies and technical assistance from the regulatory authorities.

The study concludes that the number of customers and employees enhance the efficiency of the MFI. The study also concludes that the quality of the loan, the profitability and management performance of the MFIs. The study also concludes that the cost of funds operation and administration expenses technology and the qualification of the staff also enhance the efficiency of the firm. The study also concludes that accessibility of the loans had reduced the expenditure on the customer. The study also concludes that the high interest loans, lack of formal housing loan, loan repayment period, lack of collateral, landless and problems related to land ownership were factors that constrained the accessibility of loans.

## **5.4 Recommendations**

The study makes the following recommendations.

The study recommends that MFIs that do not conduct pilot surveys to market test products should do so in order to ensure that the product design fits the needs of the customer. This is important in reduces losses that will result from launching a product that is not relevant to the customers.

The study recommends that MFIs and policy makers come up with strategies and subsidies that will see a reduction in the costs incurred from the implementation of the regulatory laws. The study recommends that the relevant bodies conduct regular supervisions of the MFIs so as to ensure that they conform to the requirements of the law.

The study recommends that MFIs embrace new technological developments so as to ensure their serve their customers in a better faster and more efficient manner. The study also recommends that the institution organizes training for their employees so as to improve their qualifications and equip them with the relevant skills that will improve e their performance.

## 5.5. Limitations

This study considered limitation as any factor that was present during the study and affected the achievement of the objective of the study. The study faced a limitation as regards respondents confidence that the information provided would not be misused but used for the purpose for which it was meant. To overcome this challenge, the researcher assured the respondents that the information they provided would be treated with confidentiality and used for academic purposes only.

Some of the employees at the MFIs were on a very tight schedule and thus could not make it to fully complete the questionnaire. To overcome this challenge the researcher left the questionnaires with the respondents and picked them at a later time.

## **5.6 Recommendations for Further Studies**

This study sought to establish the factors influencing financial access to housing microfinance by low income earners in Kenya. This study concentrated only on HMFIs. The study therefore recommends that in the future a similar study be conducted across all MFIs in the country.

The study recommends that in the future a study be conducted on factors that hinder the accessibility of credit. This will be effective in ensuring that financial institutions come up with products that are tailor made for every individual so as to increase the accessibility of loans.

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## APPENDICE

## **APPENDIX 1: QUESTIONNAIRE COVER LETTER**

Christian Ndikumagenge University of Nairobi, P.O Box 30197-00100 Nairobi.

To whom it may concern

Dear Sir/Madam

### **RE: RESEARCH PROJECT**

I am an MBA student at the University of Nairobi undertaking a research project as part of the requirements of the degree of Masters in Business Administration. The topic of my research is "Determinants of Financing Cost by Housing Microfinance Institutions in Nairobi."

For the purpose of this study, I have chosen your organization as my case study for this research. This research is in partial fulfillment for the award of a Master Degree in Business Administration.

I kindly request your assistance by availing time to respond to the questionnaire and as well I kindly request your permission to enter in contact to your clients to respond the questionnaire addressed to them, useful for the research project. Any information provided will be treated with utmost confidentiality and used solely for academic purposes. A copy of the final report will be made available to you at your request. Your assistance will be highly appreciated. Thanking you in advance.

Sincerely yours,

Christian Ndikumagenge MBA student D61/63055/2011 E-mail: <u>chrisburundi@yahoo.fr</u> Tel: 0713 180 400

## **APPENDIX 2: QUESTIONNAIRE**

This questionnaire is designed by Christian Ndikumagenge, a Master of Business Administration student at University of Nairobi to help his collect of information for his research project which is in partial fulfillment for the award of Master Business Administration degree in Finance. This questionnaire seeks your views on a number of factors as product design, regulatory framework and efficiency that have an effect on the financing cost of your organization on the access to credit by low income earners.

## <u>Please note:</u>

- > Do not write your name
- > Your individual responses are confidential and anonymous
- > Your views are important and valued.
- > Tick or fill where applicable

## Part I: Background Information

### 1. Kindly indicate your status

a. Employee of Organization involve in Housing Microfinance Name of the organization Name of Department
2. Kindly indicate your career title
a. Manager b. Head of department c. Supervisor d. Others staff
e. Consultant f. Other, specify
3. Please indicate years of experience in the organization/the field?
a. Less than 2 years b. 2-5 years c. 6-8 years d. 9-11 years
e. Above 11 years

## Part II: Product Design

For each of the statement below, please indicate the extent of your agreement or disagreement. The response scale is as follow.

4. To what extent do you have a good level of understanding of low income earners consumption behavior?

1. very great extent () 2. Great extent () 3. Moderate extent () 4. Little extent ()

- 5. No extent at all ()
- 5. Does your organization always carries out a pilot test/ Survey before launching a housing micro credit.

Yes ( ) No ( )

6. In your own opinion indicate the extent to which above appraisal factors are key in designing the housing micro loan.

1. Very great extent 2. Great extent 3. Moderate extent 4. Little extent 5. No extent at all

	Factors	1	2	3	4	5
1	Capacity/source of repayment					
2	The purpose of the loan (Type of product)					
3	Security/ Risk mitigation					
4	The profession of the client					
5	A market survey on potential clients					
6	Location of the borrower					
7	Loan tenure					
8	Economic environment					
9	Institution business objectives					
10	Subsidies/ Assistance benefited by the institution					
11	Any other, please indicate:					

# 7. In your opinion indicate the extent to which above factors are determinant in the pricing of a housing micro loan.

Very great extent ()
 Great extent ()
 Moderate extent ()
 Little extent ()
 No extent at all ()

	Factors	1	2	3	4	5
1	Cost of funds of the institution					
2	Operation and administration cost of the institution					
3	Risk associated with the borrower					
4	Guarantees and collateral on the transaction					
5	Level of Non Performing Loan in the loan book (Loan losses)					
6	Profitability of the institution					
7	Subsidies benefited by the institution					
8	Loan tenure					
9	Construction assistance service					
10	Economic environment					
11	Any other, please indicate:					

## 2. In your own opinion, to what extent does a performing loan highly depends on the product design.

- Very great extent ()
   Great extent ()
   Moderate extent ()
   Little extent ()
   No extent at all ()
- **3.** In your own opinion, indicate the extent to which the products design is critical for HMFIs business performance.
- Very great extent ()
   Great extent ()
   Moderate extent ()
   Little extent ()
   No extent at all ()
- 4. In your own opinion, indicate the extent to which the product design impact the cost of finance for the institution.
- 1. Very great extent () 2. Great extent () 3. Moderate extent () 4. Little

extent () 5. No extent at all ()

## Part III: Regulatory Framework

## 5. Which laws governs you as a microfinance institution in Kenya?

• The H	Non Governmental Organizations Co-ordination Act ( )Building Societies Act( )				
The Trustee Act     ( )     The Societies Act     ( )					
	o-operative Societies Act ()				
	Companies Act ()				
	Banking Act ()				
• The H	Kenya Post Office Savings Bank (KPOSB) Act( )				
6.	Is there a body which supervises your institution?				
	Yes ()				
	No ()				
Plea	se specify?				
7 <b>.</b>	What are the effects of such laws and regulatory requirements to the institution's operations cost?				
8.	In your own opinion, indicate the extent to which the regulatory requirements impact the cost of finance for the institution.				
1.	Very great extent () 2. Great extent () 3. Moderate extent () 4. Little				
	extent () 5. No extent at all ()				
	To what extent does the Government policies on your operations contributes to the sustainability of the institution?				
1.	Very great extent () 2. Great extent () 3. Moderate extent () 4. Little				
	extent () 5. No extent at all ()				
10.	Does the institution enjoy subsidies or technical assistance from the regulatory authorities?				
٠	Yes ()				
•	No ()				
Ple	ease specify?				

## Part IV: Efficiency

## 11. How many clients did you have by the end of 2013?

- Less than 50 ( )
- 51 to 100 ()
- 101to 150 ()
- 151 to 200 ()
- More than 200 ( )

# 12. How many loans origination/monitoring officer does the institution employed by the end of 2013?

- Less than 5 ()
- 5 to 10 ()
- 11 to 15 ()
- More than 16 ()

## **13.** How many staff the institution employed by the end of 2013?

- Less than 10 ()
- 11 to 20 ()
- 21 to 25 ()
- 26 to 30 ()
- More than 30 ()

## 14. Does your organization have branches in other parts of Nairobi?

- Yes ( )
- No ( )

Please specify?.....

# **15.** To what extent do the following factors influence the efficiency /sustainability of your institution?

Very great Extent
 Great Extent
 Moderate Extent
 Little Extent
 No Extent at All

	Factors	1	2	3	4	5
1	The number of costumers the institution has					
2	The quality of the loan portfolio					
3	The level of recovery performance					
4	Profitability of the institution					
5	Management performance					
6	Cost of funds					
7	operation and administration expenses					
8	Subsidies and technical assistance from donor					
9	The geographical coverage of the institution					
10	Technology					
11	Qualification /motivation of staff					

## <u>Part V: Overall Impact of Product Design, Regulatory Framework and Efficiency</u> <u>on Cost of Finance</u>

## 16. In your opinion indicate the extent to which above factors are determinant in the finance cost by Housing Microfinance Institutions.

1. Strongly Agree 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

	Factors	1	2	3	4	5
1	Product design					
2	Regulatory requirements					
3	Profitability					

## 

## APPENDIX 3: QUESTIONNAIRE FOR HOUSING MICROFINANCE CLIENTS

## Part I: Background Information

## 1. Kindly indicate your profession

a. civil servant b. Employee in private sector c. Sole trader d. Farmer worker
e. Retail dealer f. Unskilled Wage labour
f. Other, specify
2. Kindly indicate your gender/ marital statute
a. Female b. Male c. Single d. Married/Life partners e. With dependent
f. Without dependent
Part II: Access to Housing Micro Loan
<b>3.</b> Do you think your MFH was adequate fund to meet your requirement for housing? Yes/No, If no, How much it meet your total demand for housing loan? Mention in Percentage (%)or KES,
<b>4. 10. How much is the decline in expenditure on housing after utilization of MFH?</b> In KES/Year
In % $<10\%$ ( ) 10-20% ( ) 20-30% ( ) 30-50% ( ) $>50\%$ ( )

No Change ()

5. What are your sources of repayment?

1. Agriculture income ( )2. Income from regular job ( )3. Wage labour ( )4. Non-farm income ( )5. Remittance ( )6. loan from bank/cooperative/MFI ( ) 7. Loan from Moneylender/ relatives ( )

6. In your opinion indicate to which extent above factors may constraint the access to housing micro credit.

	1. Strongly Agree 2. Agree 3. Neutral	4. Disag	ree 5.	Strongly	Disagree	•
	Constraints	1	2	3	4	5
1	Loan Availability					
	Non-Availability of formal housing loan					
	Inadequate Quantity of formal loan					
	Non availability of Loan for furnishing					
2	Loan Processing					
	Delay in Loan processing/disbursement					
	Availability Guarantor					
3	Repayment					
	High Interest Rate					
	Loan period					
	Inflexible Timing of EMI repayment					
	Deposit of EMI/Receipt/					
	Lack of regular income/fund					
4	Collateral					
	Landlessness					
	Problem related to Land ownership/title					
	Lack of Collateral/Guarantor for loan					
5	Other problems					
	No or low subsidy					
	No construction assistance					

- 7. Did you have any housing plan prior to availing this MFH? Yes/No,
- 8. Do you think your MFH has induced you to plan for your housing activity? Yes/No,

How.....

11. Did the housing micro loan contributed to improve your social condition?

- Yes ( )
- No ( )

## 

# APPENDIX 4: LIST OF ORGANIZATIONS INVOLVED IN HOUSING MICROFINANCE

## A. List of licensed, by Kenya Central Bank, deposit taking Microfinance (DTM) Institutions. 2013

Nº	Names	Housing Microfinance Products
1	Faulu Kenya Limited	
2	Kenya Women Finance Trust Limited (KWF)	
3	SMEP Limited	
4	RUMU Limited	
5	RAKIFI	
6	UWEZO Limited	
7	CENTURY Limited	
8	SUMAC Limited	
9	U&I Limited	

# **B.** List of unregulated Microfinance Institutions

		Housing Microfinance Products &
Nº	Names	Services
1	Makao Mashinani Limited	
2	AAR Credits Services	
3	ECLOF Kenya	
4	Greenland Fedha	
5	Jamii Bora	
6	Jitegemea Credit Scheme	
7	Jihudi Kilimo	
8	KADET	
9	KEEF	
10	Microafrica Kenya Ltd	
11	Molyn Credit Ltd	
12	Musoni Kenya Ltd	
13	Opportunity Kenya	
14	Pamoja Women Development Programme	
15	Pionner FSA	
16	Platinum Credit	
17	SISDO	
18	Taifa Option Microfinance Ltd	
19	Yehu	
20	YIKE	

C. List of SACCOs licensed by SACCO societies regulations Authority

Ν	· ·	Housing Microfinance Products &
0	Names	Services
1	KUSCCO	
	The National Cooperative and Housing Union	
2	(NACHU)	
3	Ndege Chai SACCO	
4	kilifi Teachers SACCO	
5	Stima SACCO	
6	Mungania SACCO	
7	Sukari SACCO	

## D. List of Commercial Bank offering housing microfinance services

Nº	Names	Housing Microfinance Products & Services
1	Rep-Bank	
2	Cooperative Bank	
3	Family Bank	
4	Equity Bank	